



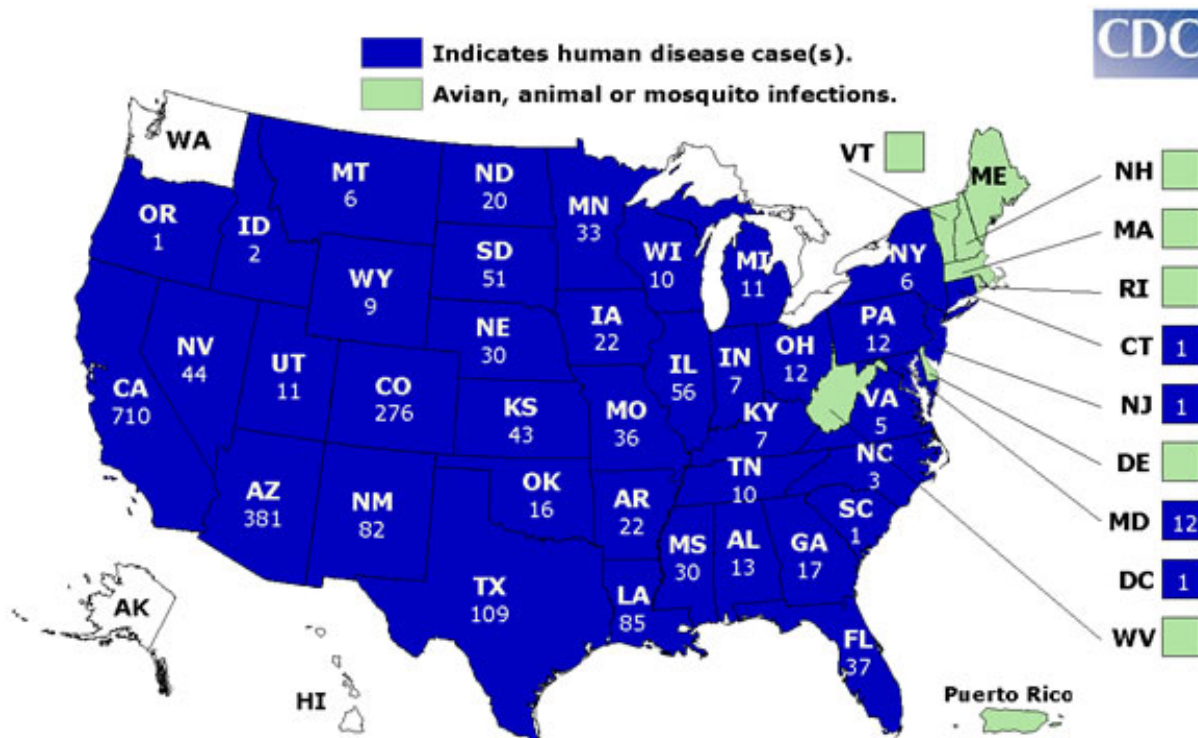
West Nile Virus Newsletter

For the second year, the Department of Health (DOH) is using this electronic newsletter as a regular communication tool for West Nile virus (WNV). It will be provided routinely throughout the summer to keep our partners informed about WNV in Washington State, as well as information from other areas of the country.

Surveillance News

Provided by the Centers for Disease Control and Prevention

2004 West Nile Virus Activity in the United States (reported to CDC as of November 2, 2004)



2,241 human cases thus far in 2004, 8,219 cases the same week of 2003

As of November 2, 2004, 40 states have reported a total of 2,241 human cases of West Nile virus (WNV) illness to CDC through ArboNET for 2004. Among 2,211 WNV cases with clinical and demographic data available, the median age was 52 years (range 1 month - 99 years) and 1,295 (59 percent) were males. Of these 2,211 cases, 793 (36 percent) were neuroinvasive. In 2004, there have been a total of 76 published WNV-related fatalities. Of these 76 fatal cases clinical and demographic data were available on 75. The median age of these 75 decedents was 74 years (range 43 - 95 years).

Additional information about national WNV activity is available from CDC at <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>. Maps detailing county-level human, mosquito, veterinary, avian and sentinel data are published each week on the collaborative USGS/CDC West Nile virus website: <http://westnilemaps.usgs.gov>.

Washington Non-human Surveillance Summary

Reported to Washington State Department of Health as of November 4, 2004

County	Horses*		Birds**		Sentinel Flocks***		Mosquito Pools****	
	Tested	Positive	Tested	Positive	Tested	Positive	Tested	Positive
Adams	0	0	3	0	0	0	0	0
Asotin	0	0	1	0	0	0	0	0
Benton	0	0	18	0	311	0	84	0
Chelan	1	0	6	0	0	0	0	0
Clallam	0	0	5	0	0	0	0	0
Clark	1	0	54	0	0	0	22	0
Columbia	0	0	0	0	0	0	0	0
Cowlitz	1	0	25	0	0	0	26	0
Douglas	0	0	0	0	0	0	0	0
Ferry	0	0	0	0	0	0	0	0
Franklin	4	0	3	0	0	0	0	0
Garfield	0	0	0	0	0	0	0	0
Grant	0	0	4	0	0	0	0	0
Grays Harbor	0	0	5	0	0	0	0	0
Island	3	0	23	0	0	0	0	0
Jefferson	1	0	6	0	0	0	53	0
King	3	0	90	0	0	0	5	0
Kitsap	1	0	0	0	0	0	241	0
Kittitas	0	0	5	0	0	0	0	0
Klickitat	1	0	2	0	0	0	0	0
Lewis	0	0	19	0	0	0	0	0
Lincoln	0	0	1	0	0	0	0	0
Mason	0	0	14	0	0	0	0	0
Okanogan	0	0	2	0	0	0	0	0
Pacific	0	0	6	0	0	0	0	0
Pend Oreille	0	0	0	0	0	0	0	0
Pierce	2	0	50	0	0	0	227	0
San Juan	0	0	6	0	0	0	0	0
Skagit	0	0	16	0	0	0	0	0
Skamania	1	0	5	0	0	0	0	0

Snohomish	3	0	90	0	0	0	32	0
Spokane	6	0	14	0	0	0	0	0
Stevens	1	0	8	0	0	0	0	0
Thurston	1	0	37	0	0	0	0	0
Wahkiakum	0	0	0	0	0	0	0	0
Walla Walla	5	0	5	0	0	0	0	0
Whatcom	2	0	10	0	0	0	0	0
Whitman	1	0	2	0	0	0	0	0
Yakima	1	0	3	0	81	0	139	0
Totals	39	0	538	0	392	0	829	0

*An additional 14 equine tested negative, but were not included in the table because county/state information was not available. WADDL Report Dated: November 2, 2004

**A total of 557 birds have been submitted for testing, of which 19 were unsuitable and not tested for West Nile virus. An additional 8 bird specimens are pending.

***Benton County MCD Report Dated: September 30, 2004

****USACHPPM-West Report Dated: October 29, 2004, WADDL Report Dated: September 29, 2004, Clark County MCD Reported: September 8, 2004, and Benton County MCD Reported Date: September 29, 2004.

West Nile Virus Economic Impact, Louisiana, 2002

By Armineh Zohrabian, Martin I. Meltzer,* Raoult Ratard,† Kaafee Billah,* Noelle A. Molinari,* Kakoli Roy,* R. Douglas Scott II,* and Lyle R. Petersen**

**Centers for Disease Control and Prevention, Atlanta, Georgia, USA; and †Louisiana Department of Health and Hospitals, New Orleans, Louisiana, USA*

Economic data about epidemics are essential for estimating the costs and benefits of strengthening and maintaining prevention and control programs, improving existing surveillance systems, and introducing other proposed interventions, such as vaccines.

A study on the magnitude of the short-term economic costs of the 2002 WNV epidemic in Louisiana is available at the CDC, Emerging Infectious Diseases webpage at www.cdc.gov/ncidod/eid/vol10no10/03-0925.htm.

Barrier Treatment Proves Effective for Cowlitz County in 2004

By Del Gilkerson, Cowlitz County Mosquito Control District

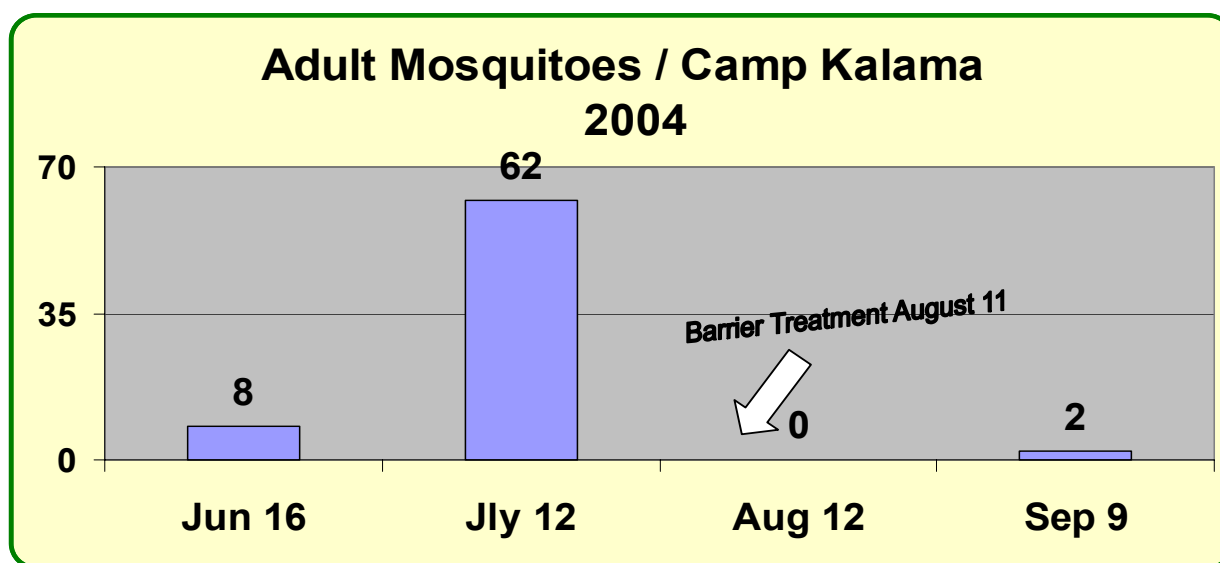
There are a few areas in Cowlitz County where larviciding has not proven effective and regular adulticiding is not practical. People are exposed to mosquito problems in picnic areas and campgrounds. It is difficult to fog using adulticides and not cause concerns with the public. Families are often out in the open, cooking and eating when adulticiding is most effective, and even if we do fog, mosquito problems are back in just a few days. We have been fortunate to have not detected West Nile virus in our state this year, but when it does arrive, places like our picnic and campground areas will be a particular concern.

This season our mosquito control district tried a barrier treatment in a few special places where other options had failed. This treatment proved very effective because the product is applied to the foliage where mosquitoes rest and can come into contact with the control agent. The active ingredient for this product, deltamethrin, is a broad range insecticide approved for use to control

a large variety of insects including mosquitoes. Because it is also approved for use in restaurants and commercial kitchens our concerns about people preparing food and eating in areas we had treated were alleviated.

Camp Kalama has historically been an area where our mosquito control district starts larviciding early in the season and begins fogging using adulticides on a weekly basis later in the season. Despite these active control measures at Camp Kalama, we still have complaints and mosquito problems. This year we started larvicide activities in March and our weekly adulticide program in early June. We placed an Encephalitis Vector Surveillance (EVS) trap in the camp and even after five weekly adulticide treatments we found that mosquito populations continued to increase. On August 11 we applied a barrier treatment. The next day our EVS trap was empty. Even a month later our EVS trap picked up just a couple adult mosquitoes.

The following graph illustrates the number of adult mosquitoes trapped before and after the one barrier treatment in Camp Kalama.



Our mosquito control district will be able to apply the barrier treatment to vegetation at any time of day. After we alert the public and move them temporarily out of the treatment area, we could treat an area in a few minutes. Our data supports the product label stating that treatment is only needed once a month. Studies in Minnesota and California show control lasting more than two months from one barrier treatment of deltamethrin. In 2004, we developed familiarity with the product so that we can use it with care and confidence if needed in the future. When we do use it again, we plan to run a rigorous trial using our surveillance methods.

Because this product can affect other non-target insects, our control district will use it only in specific situations. Our field workers need approval before they can use the product. Property owners also need to understand and approve the use of a barrier treatment before we apply it. We will not use a barrier treatment often or for many of our control areas, but it is good to have this approach available if and when the need arises.

You can contact Del Gilkerson at cowmo@kalama.com for further information.

Larvicide Records Reporting for 2004 is Underway in the State

For entities in the state who have received coverage under the Department of Health's Aquatic Mosquito Control National Pollutant Discharge Elimination System (NPDES) General Permit (or a Permit directly through the Department of Ecology), the 2004 larvicide use records must be reported by February 1, 2005. The Department of Ecology develops water quality monitoring plans based on the records that are submitted.

In 2004, a total of 82 entities in the state were covered under the Aquatic Mosquito Control NPDES Permit; 78 were covered under DOH's Permit and four had their own Permit directly from the Department of Ecology. Of the 78 covered under DOH's NPDES Permit, there were 26 cities, towns, or other governmental agencies, 21 private land owners and businesses, 10 counties, 10 mosquito control districts, three state agencies, two school districts, and six commercial pest control businesses. The six commercial pest control businesses contracted with 16 various entities to provide mosquito larvae control if needed to their water bodies.

For assistance with the reporting of larvicide records or other questions about DOH's Aquatic Mosquito Control NPDES Permit, please contact Ben Hamilton at 360.236.3364, or benjamin.hamilton@doh.wa.gov.

Community Comments

Let us hear your comments on this newsletter, your needs, or things you would like to see, by sending them to Maryanne Guichard, 360.236.3391 or maryanne.guichard@doh.wa.gov

WNV Web Resources

Washington State Department of Health www.doh.wa.gov/wnv
Center for Disease Control and Prevention <http://www.cdc.gov/ncidod/dvbid/westnile/>
Washington State University Cooperative Extension <http://wnv.wsu.edu/>
Cornell University, Center for Environment <http://www.cfe.cornell.edu/erap/WNV>
Washington State Department of Agriculture
<http://agr.wa.gov/FoodAnimal/AnimalHealth/Diseases/WestNileVirus/default.htm>

Article Submission

We are interested in receiving articles for future publications of the WNV newsletter. Please submit articles to Ben Hamilton, benjamin.hamilton@doh.wa.gov.

DOH Contact List for West Nile Virus

General Public Toll-Free Hotline 1.866.78VIRUS

Publications: Brochures/Response Plan/Fact Sheets

Laura Harper, 360.236.3380, or laura.harper@doh.wa.gov.

Surveillance: Mosquito

Jo Marie Brauner, 360.236.3064, or jomarie.brauner@doh.wa.gov.

Surveillance: Dead bird surveillance, horses, case reporting, laboratory assistance, and general WNV response

Tom Gibbs, 360.236.3060, or tom.gibbs@doh.wa.gov.

Aquatic Mosquito Control National Pollutant Discharge Elimination System (NPDES) General Permit: Training, technical assistance

Ben Hamilton, 360.236.3364, or benjamin.hamilton@doh.wa.gov.

WNV in Humans: Clinical information, case reporting, and laboratory testing

Call your local health jurisdiction or DOH Communicable Disease Epidemiology, 206.361.2914 or 877.539.4344.

Assistance with news releases and media response

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To subscribe to this newsletter

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